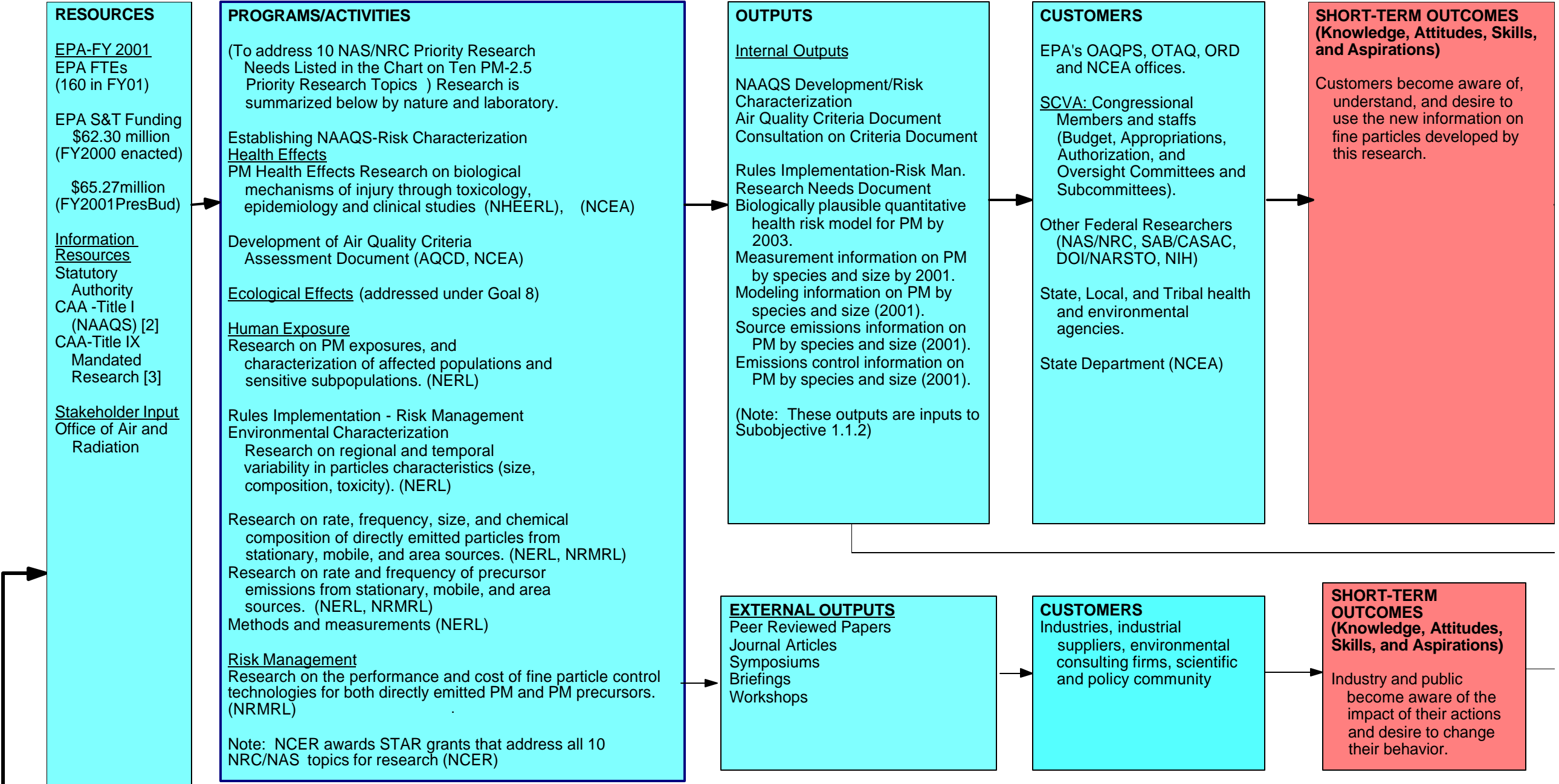


EPA HEADQUARTERS



NON-EPA PARTICULATE MATTER RESEARCH

US Federal Agency Research Activities on Fine Particulate Matter (sponsored/coordinated under OSTP/CENR/Air Quality Subcommittee) Involved With NAAQS Development, Rules Implementation and Risk Management

HHS/ National Institute of Allergy and Infectious Disease and HHS/National Institute of Environmental Health Sciences - Inner-city study of PM's role in children's asthma.
 Department of the Interior (DOI) and DOC/NOAA (IMPROVE fine particle monitoring sites)
 Department of Energy (DOE) - Lawrence Berkeley National Lab (NL), Brookhaven NL, National Energy Technology Lab (WV), Argonne National Laboratory
 NASA Ames Research Center
 Agency for Toxic Substances and Disease Registry (ATSDR)
 US Dept of Agriculture (CSREES) and Agricultural Research Service
 National Science Foundation
 DOD/ US Air Force Research Lab
 NIEHS, Centers for Disease Control

NARSTO Sponsored/Coordinated Research Activities on Fine Particulate Matter: (Involved with Implementation)

Canada and Mexico PM-2.5 research and monitoring activities.
 Selected States (California Air Resources Board (CARB), Georgia DENR, New York Department of Health, New York State Department of Transportation (Lawrence Berkeley National Lab, UC-Berkeley, Georgia Institute of Technology, Pennsylvania State, UC-Riverside, UCLA, UC-Davis, North Carolina Supercomputing Center, UC-Irvine, Cal.State-Fresno, California Institute of Technology, University of Albany, Harvard School of Public Health, Massachusetts Institute Of Technology (MIT), Rutgers, Stanford, University of Minnesota, USC, Washington University, University of St. Louis); Brigham Young University, Carnegie Mellon University, Colorado State, Johns Hopkins Ohio State, University of Delaware, University of Maryland, Florida International University, University of Colorado, University of Wisconsin, University of Tennessee, Arizona State University.)
 American Petroleum Institute (API)
 Electric Power Research Institute (EPRI)
 Industries (Energy & Environmental Research Corp., ARCADIS Geraghty & Miller, Inc., ACJ Associates; Advanced Technology Systems, Rupprecht & Patashnick, Desert Research Institute, Aerodyne Research, Air Resource Specialists, Inc., AGRI Engineering, St. Louis ENSR Corp., YSA Corp.).
 Bavarian State Ministry; British Lung Foundation (University of Edinburgh), World Health Organization, European Science Foundation, Pan American Health Organization, Association of South East Asian Nations.

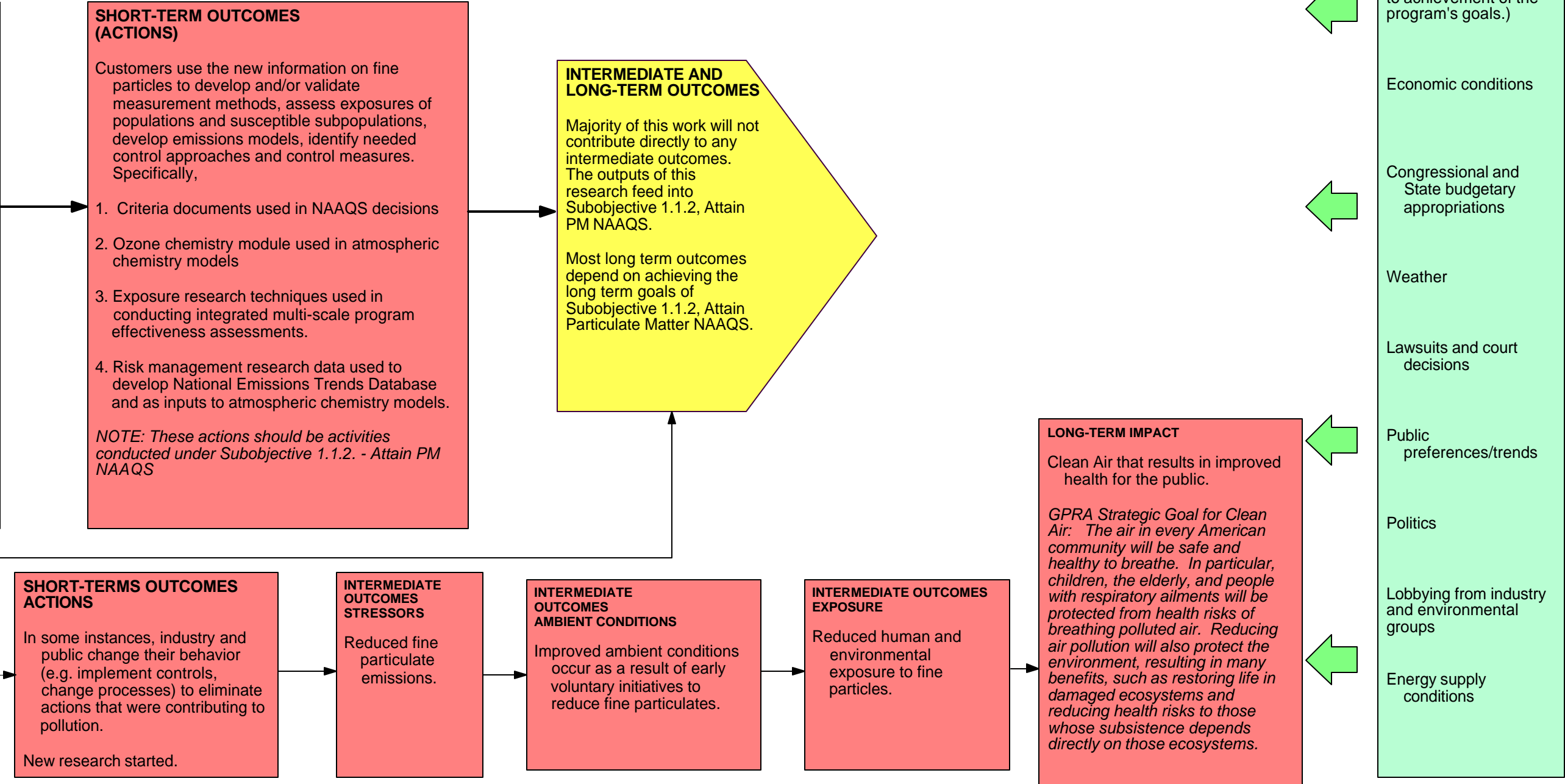
Other Non-Federal Organizations Involved With NAAQS Development

National Academy of Sciences/National Research Council (NAS/NRC) Research Committee on Airborne PM and private groups such as the Health Effects Institute
 International entities such as World Health organization and environmental agencies in the United Kingdom, Mexico and Canada

State, Local, and Tribal agencies on PM Research

California, Georgia, Massachusetts, New York

Note: As a result of programs constantly changing, this model remains a draft.



- Ten PM-2.5 Priority Research Topics:**
- 1. Outdoor measures versus actual human exposures. (NERL, NRMRL)
 - 2. Exposures of susceptible subpopulations to toxic particulates (refocusing former Research topics 3 & 4) (NERL)
 - 3. Characterization of emissions sources (revised) (NRMRL)
 - 4. Air quality Model development and testing (revised) (NERL)
 - 5. Assessment of hazardous particulate matter components (NERL, NHEERL, NRMRL)
 - 6. Dosimetry: Deposition and fate of particles in the respiratory system (NHEERL, NERL, NRMRL)
 - 7. Combined effects of PM and Gaseous Pollutants (NHEERL)
 - 8. Susceptible subpopulations (NERL, NHEERL)
 - 9. Mechanisms of injury (NHEERL, NRMRL, NERL)
 - 10. Analysis and measurement (NERL, NCEA)

Acronyms:

AMFA	Alternative Motor Fuels Act of 1988
CAPF	Clean Air Partnership Fund
CTG	Control Technologies Guidelines
HEI	Health Effects Institute
ISTEA	Intermodal Surface Transportation Efficiency Act
MVICSA	Motor Vehicle Information & Cost Savings Act
NARSTO	NARSTO (formerly, the North American Research Strategy for Tropospheric Ozone; now an acronym due to heavy investment in PM-2.5)
OSTP/CENR	Office of Science and Technology Policy/Committee on Environment and Natural Resources
PM-2.5	Particulate Matter less than or equal to 2.5 microns in diameter
PMRA	Particulate Matter Research Activities (consortium)
TEA-21	Transportation Equity Act for the 21st Century

FOOTNOTES

- [1] = This model was prepared based on EPA planning and budget documents, numerous EPA web-based information, applicable statutes and regulations, and interviews with EPA officials on the preliminary versions of the model. We did not discuss the model or its contents with EPA external stakeholders such as Congressional members, Oversight committees, industry groups, environmental groups or state agencies.
- [2] = CAA Title I calls for National Ambient Air Quality Standards (NAAQS) to be reviewed on a five year cycle. PM NAAQS revisions were last completed in 1997, and are due again in 2002 and five years after the 2002 NAAQS review. Criteria document in process.
- [3] = CAA Title IX requires that EPA conduct a research on the short-term and long-term effects of air pollutants on human health, as well as a research and development program for testing and developing methods for sampling, measurement, monitoring, analysis, and modeling of PM air pollutants. EPA is also required to conduct a program of engineering and technology to develop, evaluate and demonstrate non-regulatory strategies and technologies for air pollution prevention.